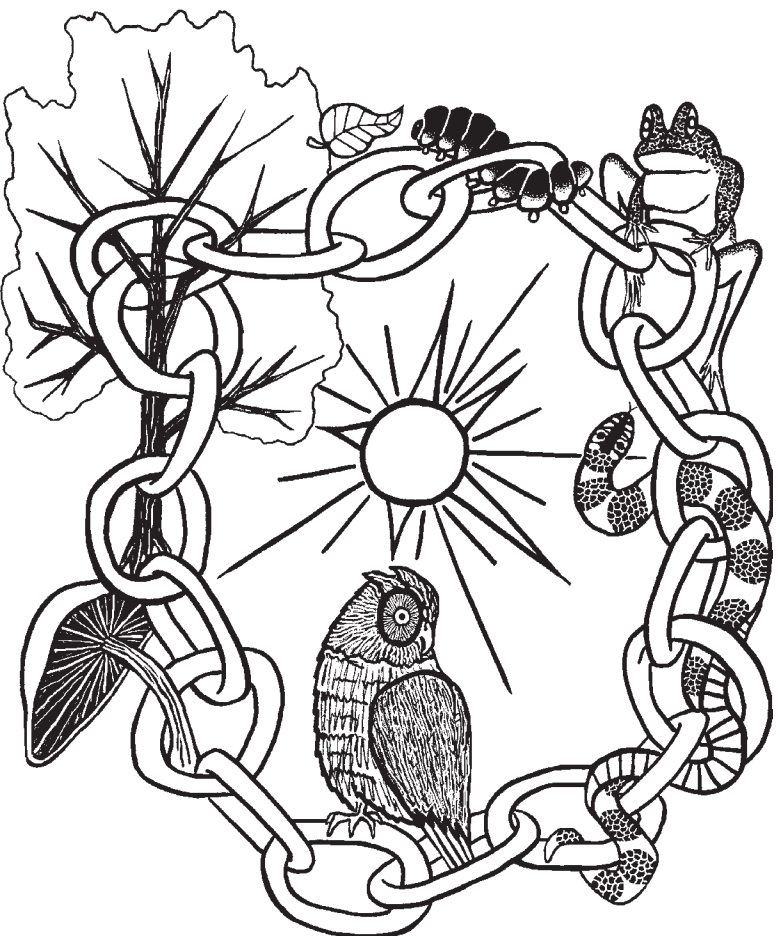


School Programs



2006 - 07



CINCINNATI PARK BOARD
BETTMAN NATURAL RESOURCE CENTER
4 BEECH LANE
CINCINNATI OH 45208

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Cincinnati Parks Educational Services

In the pages of this guide, you'll find Park Naturalist-led programs for students of all ages and levels of ability. Use the guide to locate those programs that best complement your classroom lessons and to help you schedule a program or field trip for your class.

See you out in the parks!

The Cincinnati Park Board's Educational Services Section has a mission to educate people of all ages about the ecological and historical resources in the Cincinnati Parks and Preserves, and to assist in their protection and management.

We operate 4 nature education centers, and also offer programs out in neighborhood parks. For information about a specific center, call the naturalists at the numbers below. For information about or to reserve Krohn Conservatory tours, call Krohn directly at the number below.

**For general information and most reservations,
call the Bettman Center.**

Avon Woods Nature Ctr.	4235 Paddock Rd. Paddock Hills / Avondale	861-3435
Bettman Natural Resources Ctr.	4 Beech Lane O'Bryonville / Evanston	321-6070
Caldwell Nature Ctr.	430 W. N. Bend Rd. Carthage / Hartwell	761-4313
California Woods Nature Ctr.	5400 Kellogg Ave. California	231-8678
Krohn Conservatory	1501 Eden Park Dr. Eden Park / Walnut Hills	421-5707
LaBoiteaux Woods Nature Ctr.	5400 Lanius Lane College Hill	542-2909

Reasonable accommodations will be made upon advance request.
Call 321-6070 (Nature Centers), 421-5707 (Krohn), or **352-3380 (TTY)**.
Wheelchair hikes are possible at Caldwell and California Woods.

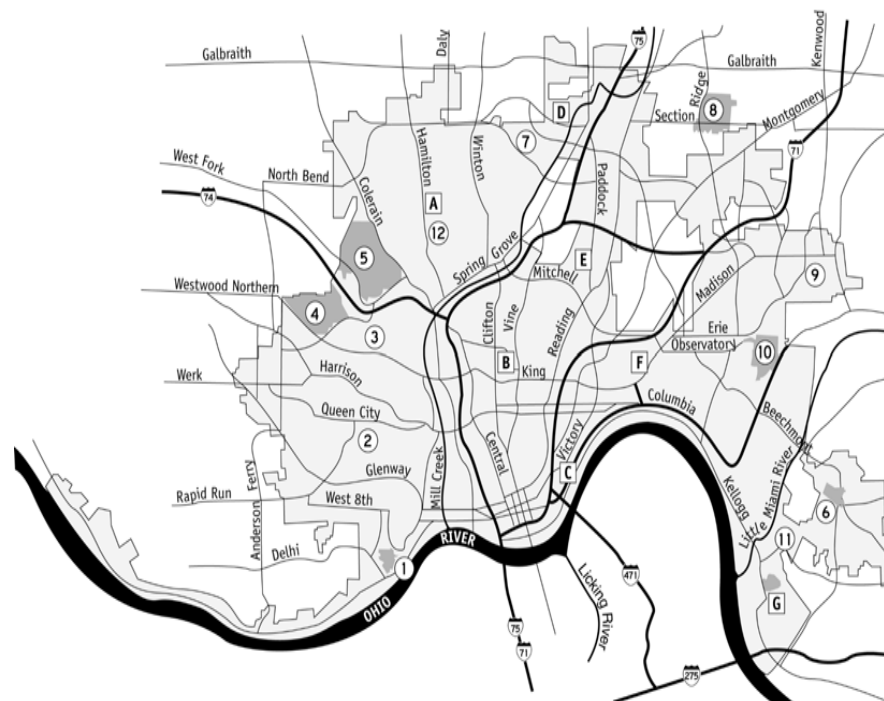
Welcome to the natural heritage of your Cincinnati Parks.

Parks & Preserves with Trails

- 1 - Mt. Echo Park
- 2 - Glenway Woods
- 3 - Brodbeck Preserve
- 4 - McFarlan Woods (Mt. Airy)
- 5 - Mt. Airy Forest
- 6 - Stanbery Park
- 7 - Seymour Preserve
- 8 - French Park
- 9 - Little Duck Creek
- 10 - Ault Park
- 11 - Magrish Preserve
- 12 - Buttercup Valley / Parkers Woods

Nature Centers

- A - LaBoiteaux Woods
- B - Trailside (Burnet Woods)
- C - Krohn Conservatory
- D - Caldwell
- E - Avon Woods
- F - Bettman
- G - California Woods



Now in Cyber-space!

Looking for learning activities for grades 4 - 6? Check out the Ecosystems, Habitats, and Trees modules at our Nature Connections website Naturenextdoor.org. Find more Cincinnati Parks information at cincinnati-oh.gov/parks and CincinnatiNature.org

How to Schedule a Program:

For Krohn Conservatory tours, call 421-5707.

For all other programs, call 321-6070 ext. 10.

Programs fill quickly, so please schedule *at least* 3 weeks in advance.

When you call, please have ready:

- ➔ several preferred dates already cleared with administration and buses, since we cannot put “holds” on dates
- ➔ preferred program and location, and an alternate
- ➔ the number of children and adults coming
- ➔ school and grade level
- ➔ contact name; phone & FAX numbers



Group Size / Chaperones

The number of children we can handle varies. On most days, each nature center can handle 3 average classes (about 60 - 65 children) simultaneously. If you are planning to bring more than 65 children, we may need to schedule them for multiple centers or multiple days.

Each class needs to be accompanied by at least the teacher; 2 adults per class is preferred. The Naturalists rely on you to control the group, and to be with them during all the activities.

Fees / Payment

The average program fee, regardless of length, is **\$3.00** per child or adult chaperone for schools located within Cincinnati; **\$5.00** per child / adult for schools outside Cincinnati. All teachers come free. Programs involving consumable supplies may cost more and are noted in program descriptions.

Payment can be made by voucher / P.O., or by check (payable to: Treasurer, City of Cincinnati) in advance or at the time of the program.

Confirmations / Cancellations

Approximately one week prior to your program, you should receive a call from your Naturalist, to confirm the details of your program. Please feel free to call the nature center any time prior to your visit to discuss your program or request that it be customized for your class.

We do not send out written confirmations.

Except in cases of weather emergencies, cancellations must be made at least 48 hours in advance of your scheduled visit, or a \$20.00 service fee will be charged. We do proceed with programs in cases of rain, normal winter cold, etc.

Lunches

Lunches should be marked with each child's name, and include a drink (The nature centers do not have pop machines). Depending on weather, children can eat inside the nature center or outside at picnic tables.

Dress for Success

Come prepared for the weather, and count on being outside for at least part of the visit. The true value of a nature center is in its forests and fields; we want the children to experience nature outdoors.



Children should wear rain gear or coats as the weather requires, sturdy shoes (no jellies or flip-flops), and hats and gloves in cold weather.

Parking

Free parking is available at all of the centers and Krohn Conservatory.

Typical Program / Times

Half-day programs can be either morning or afternoon, and run from 1-1/2 to 2 hours. A typical half-day program consists of either a hike, or an indoor program and a hike. Most program topics described in the following pages can be offered in a half-day format; *however*, some activities will be dropped due to time constraints.

Full-day programs last 3 - 4 hours, and include a lunch break.

The typical full day program consists of an indoor program, a hike related to the program theme, and various hands-on activities. Most of the programs described in the following pages are designed to be full-day programs. *For the best experience, we recommend that you come for the full-day program.*



Accessibility

Reasonable accommodations are available upon advance request. Wheelchair-accessible hikes can be done at Caldwell and California Woods Nature Centers (some indoor program elements not wheelchair accessible at California Woods). Call the Centers for details. Program content and presentation style can be adjusted to accommodate children with learning delays or disabilities, or Naturalists can work with teachers to create an appropriate program.

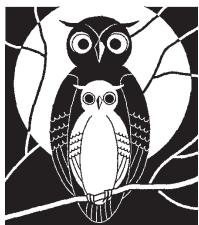
Customizing

Park Naturalists are happy to work with you to customize our programs to best fit your instructional needs. If you would like specific vocabulary, concepts, activities or information emphasized, please call the appropriate center as soon as possible to work out those specifics.

Kit-Friendly and Content-Standard Based

Using a kit-based science curriculum? Park Naturalists can provide your class with a program that reinforces kit concepts and provides examples from local ecosystems. Call the appropriate center to discuss your program specifics.

Most of the programs listed in the following pages have been designed to address **State Academic Content Standards**. Please call the appropriate center for more information on how a specific program correlates to the Academic Content Standards.





About grade levels

Several programs listed show a broad grade range. For these, we do **different variations appropriate for the different grades or ability levels**.

Center Naturalists can explain how they would adjust the program for your class.

Outreach

The programs as described on the following pages are designed for presentation at the indicated nature center. However, some of those topics (as indicated in their descriptions by the icons shown below) can be handled as outreach programs in neighborhood parks (), or at a school ().

Of course, activities will be modified; what can be done depends on the resources available at the outreach site. Call the appropriate nature center to discuss details of what can be offered at specific locations and how programs would vary from what is described.

Outreach programs are limited to Cincinnati Parks and schools located within the city of Cincinnati.

Outreach Fees:

At Parks: \$3.00 (schools within Cincinnati) or \$5.00 (schools outside Cincinnati) per student / adult chaperone

At Schools: \$75.00 first program; \$25.00 each additional program, same topic, same day



Teacher Services

We can offer **workshops in Projects WILD, Learning Tree, and WET**. If your school is interested in setting up a workshop for staff, call 321-6070 ext. 14 to discuss arrangements.

Looking for a Land-Lab?

Park Naturalists can advise you on setting up a land-lab on your school property. Better yet, let us work with you on how you can use a Cincinnati Park near your school as a land-lab.

No charge for this service for schools located within the City of Cincinnati.

Call the nature center nearest your school, or 321-6070 ext. 14.



"Back to Basics" Programs

These programs are available year-round at most nature centers.

Seasonal Hikes and Programs

Nature reinvents itself with each changing season. These hikes and programs explore and explain the changes and phenomena associated with the particular season of your visit. Included in these would be such favorite topics as: Why leaves change color and fall in Autumn; How animals prepare for or survive Winter; Spring flowers and Bird migration.

Local Wildlife

Learning to identify and appreciate local wildlife opens doors to understanding the natural world, and how humans and wildlife interact. Most programs use a combination of taxidermied mounts and small live animals (snake, turtle, toad). The emphasis can vary to suit your needs and objectives.

Basic Nature Topics

Planning a unit on **birds, mammals, reptiles, insects, trees, or wildflowers?** A Naturalist program can bring it to "life" with taxidermied or mounted specimens, slides, lore and information, and hands-on exploration in a park.

Endangered Species

How do plants and animals become endangered? What animals are endangered in Ohio? What are people doing about it? A Naturalist talk, with hands-on games and activities, answers these and other questions.



Avon Woods

Program & Description

Season Available

Grade Level

Earth Savers

F, S

2-6

Students will explore ways to Reduce, Reuse, Recycle and Restore our natural resources and environment through hands-on and interactive activities. Fun and active techniques are employed to engage students in the recycling of solid waste, nature's recycling methods and composting. Program is limited to 3 hours or less. Teachers can apply to the Hamilton County Solid Waste Management District for reimbursement of transportation costs to this program. For a "Solid Waste Travel Reimbursement Application" and more details (qualifications apply), contact Sue Magness at sue.magness@hamilton-co.org or 513-946-7736.



Animal Real Estate



F, W, S

K-3

Students relate local animal habitats to their own homes and neighborhoods. A hike, hands-on activities and a fun-filled animal presentation closely examine the four components of a habitat and how animals are adapted to live within one.



Life of an Ohio Native American Child

F, W, S



K-4

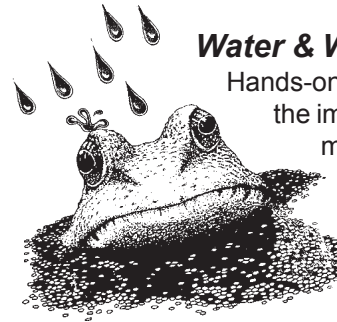
Emphasis is placed on the daily life (food, clothes, family, education) of an Ohio child 200 to 300 years ago in a lively presentation with audience participation, hands-on activities and native games. Students will discover on a hike how these early inhabitants interacted with their natural environment.

Mysteries of the Plant Kingdom: Seeds to Trees

F, S

1-6

Students become detectives and use observation, evaluating and simple classification techniques to solve the mysteries of plants and trees. We will explore life cycles, seasonal changes, photosynthesis, and plant needs and characteristics while discovering the effect plants have on our everyday lives.



Water & Wildlife

F, W, S

4-8

Hands-on activities engage students in analyzing the importance of water as one of the Earth's most valuable resources. Investigate how pollution affects water quality and the animals that make it their home. Students will use problem solving skills and critical thinking to plan healthy watershed communities for wildlife and for humans.

Our Weakening Web



F, W, S

3-5

This program sets the foundation for understanding the basic concepts of endangered species, food chains, web of life, predator / prey relationships and other connections between living things in an ecosystem. A hike focused on using the scientific process, role playing games and other activities challenge students to become stewards for the environment.

Earth Story, Cincinnati

F, W, S

3-8

Join us on a journey through time and gain a geologic sense of place. Through interactive participation and hands-on activities this program explores the geologic processes that brought us where we are today. The emphasis is on the Ordovician life that makes this area of the Cincinnati Arch famous. Students explore a geologic time-line, glaciation, and how the animals of the past are related to their modern Cincinnati cousins.

A Pioneering Story

F, W, S

5-8

This fast-paced program allows students to step back into time to role-play families moving into Ohio, make survival decisions, and fail or prosper accordingly. The hike will focus on the contrast between



Caldwell Nature Center

Program & Description

Season Available

Grade Level

Native Americans



F, W, S

K-3



This interactive program focuses on the everyday life of an Ohio Native American child in the late 1700's, including food, clothing and shelter. Students will try some daily life skills, pictographs, games, and dances.

The hike stresses Native Americans' historic uses of forest resources. Note: To include daily life style activities, program must run a minimum of 2 hours.

Cincinnati's Wild Places



F, S

1-4

Through exploring three different habitats at the preserve, students learn how living organisms meet their needs for food, shelter, water, and space. Program emphasizes basic ecological principles like energy flow in an ecosystem through food chains, adaptations of plants and animals, interactions between organisms, and how ecosystems change.

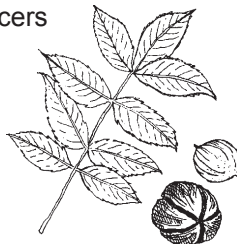
The Green Team



F, S

3-6

Students will learn about the unique role of plants as producers of food through photosynthesis. A hike can include plant life cycles, pollination, seed distribution, how plant structures are related to function, and interactions between plants and animals. Fall programs can include leaf collections and the use of classification keys.



Weather



F, W, S

3-6

A lively series of demonstrations introduces students to how air, water, and heat produce Earth's weather. Then students will move through the water cycle as they experience the "Incredible Journey" of a water drop. On the hike we'll look for the effects of weathering and erosion and measure temperature in various locations.



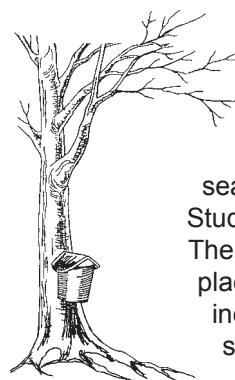
Cycles and Recycles



F, W, S

3-8

Study the many ways both ecosystems and people recycle. Games, activities and a hike focus on natural cycles and decomposition. Teachers can apply to the Hamilton County Solid Waste Management District for reimbursement of transportation costs to this program. For a "Solid Waste Travel Reimbursement Application" and more details (qualifications apply), contact Sue Magness at sue.magness@hamilton-co.org or 513-946-7736.



Maple Sugaring

Feb / Early March

Pre-K -8

Learn how Sugar Maple trees produce sap and why it is collected for syrup only during this brief season. Watch us collect the sap and cook it down. Students taste maple sap in three stages of production. The *basic program* is one hour in length with half taking place outside. A *two hour extension for grades 1 - 5* includes Native Americans' use of maple sap, science experiments, and additional activities.

Fossils, Soils and Cincinnati Geology

F, S

Pre-K -8

Students participate in an interactive introduction and an exploratory creek hike to find Cincinnati's famous fossils. A two hour program for Pre-K through Grade 2 covers fossils only. Grades 3 and older will investigate geologic processes such as rock formation, soil types, weathering and other forces, past and present, that shape Cincinnati.

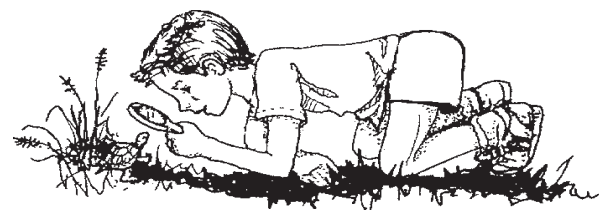
The Real World



F, W, S

Pre-K -4

Does your class know more about the Internet than their backyard? Enjoy a grab-bag of the Naturalists' favorite activities with the emphasis on fun and exploration (They'll soak up lots of information as well). Wear old clothes and sturdy shoes for woods and creek exploration. Touch nature, meet an animal or two, and play a game.



California Woods

Program & Description

Season Available

Grade Level

The Ecology of Habitats

F, W, S

1-8

Students will be introduced to local habitats in the Cincinnati area and how basic ecological principles apply to each of these habitats.

An indoor presentation will focus on predator/prey relationships and animal structures. An outdoor hike will include an in-depth, hands-on study of the forest, meadow and creek habitats.

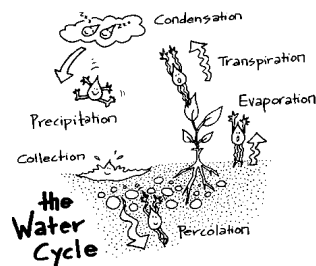


Solid Waste to Super Soil

F, W, S

2-8

Students will discuss cycles in nature including life cycles of amphibians (toads/frogs), insects (honeybees), plants, water, oxygen and carbon dioxide. An interpretive hike will focus on seasonal cycles of nature. An indoor program will focus on human solid waste and recycling. Teachers can apply to the Hamilton County Solid Waste Management District for reimbursement of transportation costs to this program. For a "Solid Waste Travel Reimbursement Application" and more details (qualifications apply), contact Sue Magness at sue.magness@hamilton-co.org or 513-946-7736.



The History and Mystery of Maple Sugaring

Feb / Early March

K-4

From the pioneer to today's processors, this program will trace the history of maple sugaring. Students will assist in tapping, collecting, and processing maple sap. An indoor talk will focus on plant physiology and the process of photosynthesis. Participants will be allowed to taste all levels of the maple product.

Fascination with Pollination



S

2-6

This program follows the process of how a flower turns into a fruit or seed. Students will learn how wind, gravity, and animals pollinate flowers. Children will also observe honeybees up-close through an observation hive and discover their important role in pollination. Hands-on activities will cover flower physiology, bee biology and hive components. An interactive hike will focus on how flowers are structured to attract different pollinators.



Lands Across Time - The Geology of Cincinnati

F, W, S

3-6



Students will use interactive demonstrations to learn about the rock cycle, glaciation, freeze / thaw processes, and fossilization. An exploratory hike will focus on erosion and give children an opportunity to take home fossils from our Lick Run Creek.

Program can also be customized to the teacher's lesson plans. Sturdy footwear is required.

"Tree"-mendous Trees



F, S

Pre-K-5

This program is a well-rounded introduction to all aspects of the plant kingdom. An outdoor hike will be geared for the season. The indoor presentation will focus on plant physiology and photosynthesis.

An Old Way of Life: A Pioneer Experience

F, S

3-6

Students will gain knowledge of pioneer ways and experience a typical day in the life of a pioneer. Students will realize how lifestyles, religion, customs and traditions helped shape Cincinnati. An interactive hike will introduce the students to characters of that period.

Local Wildlife



F, W, S

K-2

Students will be exposed to the wildlife of the Cincinnati area. An indoor presentation will focus on how our local wildlife are adapted to survive in a specific habitat and touch briefly on animal classification. An outdoor hike will reveal animal homes and food sources.

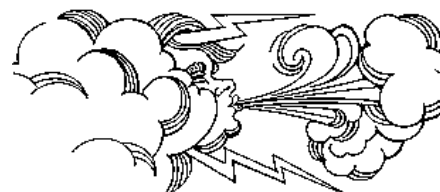
Weather: Wild or Mild?



F, W, S

2-6

Students will become junior meteorologists as they learn how to make predictions about the weather. Using a weather map and symbols, the students will interpret patterns most often encountered in our region. Weather demonstrations and instrument experiments will be performed by the students.



LaBoiteaux Woods

Program & Description

Season Available

Grade Level

The Wonders of Fall **F**

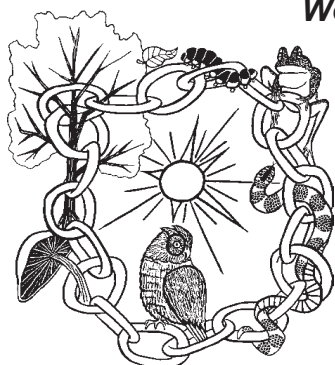
K-3

This program focuses on how plants and animals meet their survival needs in the fall. Students will walk the trails and complete fun activities to study food sources, life cycles, and seasonal changes in the woods. A puppet show is included in this program.

Cincinnati Safari **F, W, S**

K-12

Introduce your class to the wilder side of Cincinnati through this active program! Naturalists will lead a fun variety of activities including trail exploration, original games, and live animal demonstrations. Students will not only see, but also hear, smell, and feel unique qualities of their natural community.



Web of Life: Ecosystems

F, W, S

4-6

A hands-on program in a forested setting, where students will observe the interactions and interdependencies of native plant and animal life. Activities will also illustrate human connections to the ecosystem and the significance of personal actions to the web of life.

Plants are FUNdamental **F, S**

2-4

Explore the preserve for plants in different stages of their seasonal or life cycles. Students will see how plant structure relates to function in different habitats, and concepts of interdependence and diversity come alive through games and activities. The program can include fossil plants, using dichotomous keys, honeybees and pollination, and a "make and take" classroom demonstration.



Losantiville: Ohio Valley Settlers

F, W, S

2-5

Through an introduction and maps, students travel back in time to learn about key historical figures, the Ohio River Valley and the geography of the Northwest Territory. A hike will explore the rich resources in this region, the land prize of the Revolutionary War. Through hands-on activities, students will compare and contrast work, study and play in the 1790's with today.

Clothing, chores like carding wool and drop spinning, games like Devil Sticks, Game of Graces and Jack of Straws, and making a Thaumatrope will bring Ohio's past into the present.

Spring Magic **S**

K-2

Celebrate the season of new life with a trail walk and activities that illustrate nature's important cycles. Children will learn how plants and animals meet their basic needs in various local habitats. A puppet show introduces the program.

Survival: Bringing Literature to Life

F, S

4-8

Hatchet, *My Side of the Mountain* or *Danger Along the Ohio* will come to life as students hike to locate sources of food and water, and build an emergency shelter in the woods. They will also try some essential outdoor skills such as fire building, reading maps and using a compass. The program will build excitement, deepen understanding and instill self confidence. Read the book before the program.

Recycling **F, W, S**

1-8

"Reduce, Reuse and Recycle" is also Nature's way. Students learn about natural resources and cycles, composting, recycling and other ways to minimize waste through a hike and fun activities.

First semester groups can also make and take a vermicomposting (worm) bin for the classroom. (Request worms when you book the program.) Teachers can apply to the Hamilton County Solid Waste Management District for reimbursement of bus costs to this program. Get details and a "Solid Waste Travel Reimbursement Application" from Sue Magness at sue.magness@hamilton-co.org or 513-946-7736.





Pre-K K 1 2 3 4 5 6 7 8

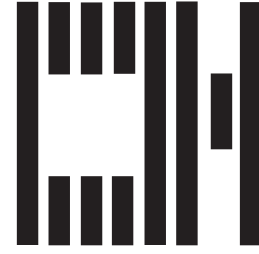
Avon Woods Nature Center

Earth Savers
Animal Real Estate
Life of an Ohio Native American Child
Water and Wildlife
Mysteries of the Plant Kingdom
Earth Story, Cincinnati
Our Weakening Web
A Pioneering Story



Caldwell Nature Center

Native Americans
Habitats: Cincinnati's Wild Places
Fossils, Soils and Cincinnati Geology
Plants: The Green Team
Weather
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Maple Sugaring
The Real World



Pre-K K 1 2 3 4 5 6 7 8

California Woods Nature Center

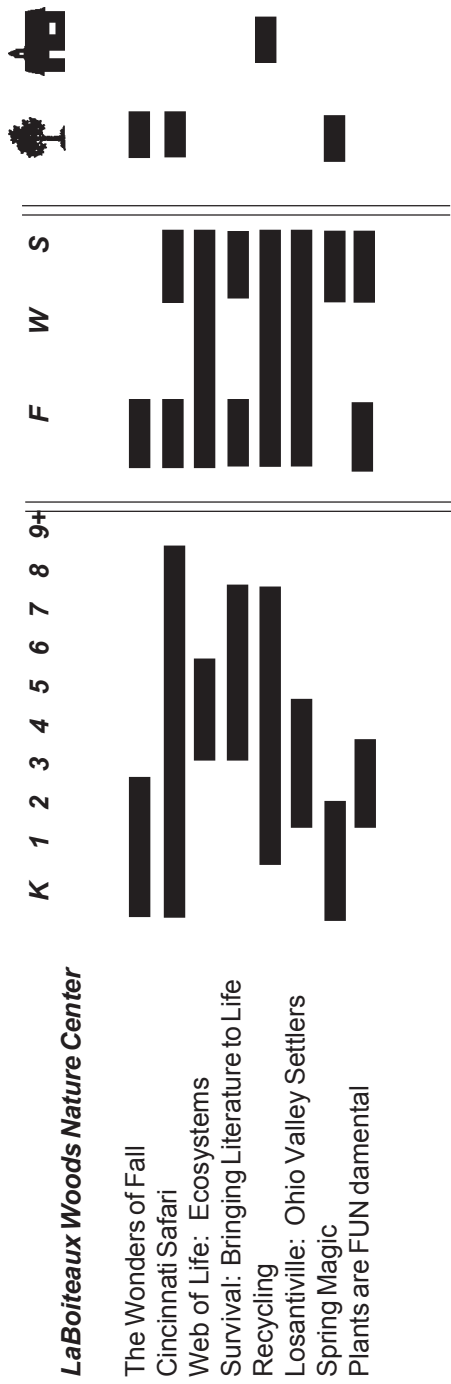
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"Tree"-mendous Trees
An Old Way of Life



Remember: all centers can do "Back to Basics" nature programs, and programs that expand on your kit-based life science curriculum. See a topic that correlates to your curriculum, but not your grade level? Call and ask how the naturalists can present it for your class.

Krohn Conservatory

Guided tours available for school classes.
Call 421-5707 for more information.



Remember: all centers can do “Back to Basics” nature programs, and programs that expand on your kit-based life science curriculum. Call and ask how the Naturalists can present it for your class.

Nature Connections

The Cincinnati Parks is providing free Naturalist-led programs for grades 4-6 in Cincinnati schools (public or private) with 70% or more of students enrolled in the federal lunch program. Each enrolled class receives 3 seasonal programs correlated to Ohio Academic Content Standards. This program was started with the help of an Ohio EPA - OEEF grant. Call **321-6070** for more information

Free Busing? Through a partnership with Hamilton County Solid Waste District and Rumpke, some free busing is available for recycling programs. Call Pat Agnew at 542-2909 for more information.

With over 5,000 acres preserved in more than 150 park areas, Cincinnati's Parks are among the most extensive and best regarded in the nation. Park sizes range from small neighborhood gardens to 1,471-acre Mt. Airy Forest, one of the nation's largest municipal forests. Fifty-nine parks contain over ten acres; twenty-one comprise fifty acres or more. Spread geographically throughout the city, Cincinnati Parks grace every neighborhood. *If your school is located within Cincinnati, there is a park near you.*

Your closest park might be a traditional developed park, an undeveloped nature preserve, a recreation area, or community greenspace. The resources at your disposal will vary from park to park, but you are sure to find opportunities that will enhance and strengthen your lesson plans.

Entrance into all Cincinnati parks is free, as is the use of their outdoor areas.

At developed parks you can expect to find picnic areas, shelters, playgrounds, and natural areas that range from lawns to meadows to extensive woodlands with trail systems. Undeveloped preserves and greenspace protect a variety of natural habitats; trails may or may not be present. Some special features and facilities are:

- a self-guiding Tree Trail (Ault Park)
- Arboretums and educational gardens (Mt. Airy Forest; Ault)
- the Presidential Tree Grove (Eden Park)
- overlooks of the city and its rivers (great for history & earth science)
- over a mile of natural river bank (Fernbank Park; Magrish Preserve)
- sculpture and architecture both historic and modern
- historic structures, locations, monuments, and a pioneer cemetery
- Frisbee golf courses; and a Fitness Trail (Eden Park).

For brochures on the Arboretums, Overlooks, or Art and Architecture; for a list of Cincinnati parks; or for general information on the facilities available at a particular park, call **352-4080**.

For more information on the natural habitats, species, or resources found in a particular park, call **321-6070**.

Park Naturalists encourage you to use your parks as educational resources for science, social studies, and language arts. ***If you would like a Park Naturalist to attend a staff meeting to discuss how your school can best use a nearby Cincinnati park, call the Nature Center nearest you or 321-6070.*** Naturalists are also willing to work with individual teachers, as time allows, helping them discover the outdoor learning center hidden in their neighborhood park.